

U.S.S.N. 10/707,612

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03-1090 (BOE 467 PA)

IN THE DRAWINGS:

Please substitute the three (3) sheets of drawings submitted herewith, one sheet containing Figures 6 and 7, one sheet containing Figures 13 and 14 and one sheet containing Figures 15, 16 and 17, in place of the originally-filed drawing sheets containing the same Figures.

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REMARKS

Claims 1-40 are currently pending in the above application.

On page two, paragraph one of the Office Action, restriction to one of the two provided inventions was required under 35 U.S.C. §121. Applicants respectfully traversed the Examiner's restriction. However, Applicants did provisionally elect the restriction as follows:

The invention of Group I, namely claims 1-18 and 40.

Further, as stated on page three, paragraph six of the Office Action, when electing Group I, the Applicants were further required under 35 U.S.C. §121 to elect a single disclosed species from each Species Group (I and II) for prosecution on the merits. Applicants respectfully traversed this additional restriction as well. In response to this requirement, Applicants did provisionally elect the restriction as follows:

Species 1 of Species Group I, namely claims 1-7; and Species A of Species Group II, namely claims 2, 9, and 40.

In view of the foregoing remarks, Applicants submit that the claims to be examined included claims 1-7, 9 and claim 40. This is contrary to the determination in the present Office Action in Paragraph 1, which lists only claims 1-5 as being examined. Applicants' attorney further had a telephonic conference with the Examiner just prior to filing the previous Response on June 30, 2005, in which the examination of claims was specifically discussed, and wherein the Applicants were led to believe that claims 1-7, 9 and 40 were supposed to be examined. In addition, as necessitated by the withdrawal of claim 16, Applicants have amended remaining claim 40 to include the subject matter of claim 16, from which it was previously dependent. Reconsideration of the claims being examined in lieu of these comments is respectfully requested.

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The drawings stand objected to for failure to comply with 37 CFR 1.84(p)(5) because they do no contain the reference numerals 14, 44, 48 and 66. Applicants herein submit substitute drawings that include the reference numerals inadvertently missed. Reconsideration of the drawings is respectfully requested.

Claims 1-2 and 4-5 stand rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, as obvious over Tsotsis (U.S. Application No. 2004/0219855). Applicants respectfully traverse the Examiner's rejection.

Tsotsis is directed towards preform materials for impact-resistant composite materials suitable for liquid molding. Tsotsis describes a material consisting of alternating layers of reinforcing unidirectional fibers and non-woven interlayers. The interlayer may include spunbonded, spunlaced or mesh fabric formed from polyphenylsulfone ("PPS"). In other words the interlayer of PPS is coupled within alternating layers of unidirectional fabric. The entire material may then be resin infused in a liquid molding process or resin transfer molding process, typically with an epoxy resin, to form the composite material.

The present invention, as in amended claim 1, requires a substantially continuous polyphenylsulfone ("PPS") substrate material substantially embedded with unidirectional fibers such that the composite material has an average allowable heat release not to exceed a 65/65 standard. Tsotsis does not disclose the use of a substantially continuous PPS substrate resin impregnated with unidirectional fibers. As such, claim 1 is not anticipated by, or alternatively obvious over, Tsotsis. Similarly, claims 2 and 4-5, which depend from claim 1, are similarly allowable over Tsotsis. Reconsideration of claims 1-5 is thus respectfully requested.

Claims 1-2 and 4-5 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, claims 1-5 stand rejected as being obvious over Bompard (U.S. Patent No. 5,014,755). Applicants respectfully traverse the Examiner's rejection.

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Bompard discloses a textile structure based on filaments impregnated and/or coated with thermoplastic material. Similar to Tsotsis above, Bompard does not disclose a substantially continuous PPS substrate layer, but instead discloses a weaved fabric material in which the filaments forming the weave are coated with a thermoplastic material such as PPS. A coated fabric like material is substantially different than a continuous substrate that is fiber containing and capable of meeting a desired heat release characteristic. As such, amended claim 1 is not anticipated by, or alternatively obvious over, Bompard. Similarly, claims 2-5, which depend from claim 1, are similarly allowable over Bompard. Reconsideration of claims 1-5 is thus respectfully requested.

Claims 1-5 stand rejected under 35 U.S.C. 103(a) as obvious over Tsotsis (U.S. Application No. 2004/0219855) in view of Gomez et al. (U.S. Patent No. 5,319,003). Claims 1-5 also stand rejected under 35 U.S.C. 103(a) as obvious over Bompard (U.S. Patent No. 5,014,755) in view of Gomez et al. (U.S. Patent No. 5,319,003). Applicants respectfully traverse each of these Examiner's rejection. In both sets of rejections, Gomez is added to teach that it is known to add e-type or s-type glass fibers to form the composite materials of Tsotsis and Bompard and to, presumably, teach the present invention as in claims 1-5. However, for reasons stated above, neither Bompard nor Tsotsis teach a substantially continuous PPS substrate material impregnated with unidirectional fibers as in amended claim 1. Thus, the addition of a specific type of fibers without changing the characteristics of the substrate material does not cure this deficiency. As such, claims 1-5 are not taught by the combination of Gomez with either Tsotsis or Bompard. Reconsideration of claims 1-5 is thus respectfully requested.

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In view of the foregoing remarks, Applicants submit that the claims 1-7, 9 and claim 40 are in proper form and allowable over the cited prior art. The Examiner is invited to telephone the Applicants' undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Respectfully submitted,

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Dated: November 9, 2005